

## ABSTRACT OF THE DISCLOSURE

An object of the present invention is to produce a differential detection read sensor for perpendicular magnetic recording using two magnetic resistance elements; and to provide a thin film head for perpendicular recording using the read sensor and a magnetic recording apparatus having high recording density equipped with the head. The object of the present invention can be achieved by a reproducing sensor comprising a pair of magnetic resistance layers; a non-magnetic conductive layer; a pair of conductive layers; and a pair of magnetic shields.